Installation Manual

HPX-1600

Retractable Connection Port
and HPX Modules

Environment Accessories

Last Revised:4/27/2012

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HPX-1600 Hydraport

Overview

The HPC-1600 HydraPort Retractable Connection Port (FG550-cc) is the first completely modular, retractable cable connection system built to accommodate the diverse connection needs of conference and meeting room visitors. This sleek, elegant, ergonomic design features a retractable base station that smoothly rises to expose device connections and recedes back down and conceals the typical cable mess that can distract from the business at hand (FIG. 1). All this while each cable stays connected.

FIG. 1 HPX-1600 Retractable Connection Port

Common Application

Boardrooms, conference rooms, meeting rooms or auditoriums where equipment is permanently installed in the room and users must connect to that equipment from a conference table or lectern.

The HPX-1600 is designed to be mounted into a horizontal surface such as a conference room table or lectern in order to provide connectivity for power, networking, Audio/Video and control.

Specific connectivity is accomplished by populating the HPX-1600 Base Assembly with various modules (see the *Product Specifications* section on page 2 for a list of available modules).

Product Specifications

HPX-1600 Specifications	
Dimensions (HWD):	
Max above mounting surface:	9.57" x 10.55" x 4.53" (243mm x 268mm x 115mm)
Max below mounting surface:	15.08" x 11.54" x 6.26" (383mm x 293mm x 159mm)
Min. mounting surface thickness:	19mm (.75in)
Max mounting surface thickness:	50mm (2.0in)
Weight:	
Base Assembly only:	2 Kg (4.41 lbs)
Typical Installation:	3 Kg (6.61 lbs)
Models Available:	• International, Black trim (FG550-BL) • International, Silver trim (FG550-SL) • North American, Black trim (FG550-01-BL) • North American, Sliver trim (FG550-01-SL)
Enclosure	Natural finish metal frame with plastic top and bottom covers moving vertically in a plastic sleeve assembly. • Matt black top cover and trim ring (FG550-BL, FG550-01-BL) or matt silver top cover and trim ring (FG550-SL, FG550-01-SL). • Matt black module face plates on all I/O modules.
Rear Connections	• Included rear connection – IEC 320 C14 Power cord receptacle (FG550-BL, FG550-SL), Included AC Power Cord (FG-550-01-BL, FG550-01-SL). • Rear connections for individual modules are routed through openings in the unit's bottom cover.
Compatibility:	• HPX-P200-US, Hydraport Power Outlet Module – US (FG551-01) • HPX-P200-UK, Hydraport Power Outlet Module – UK (FG551-11) • HPX-P200-EU, Hydraport Power Outlet Module – EU (FG551-21) • HPX-P200-AU, Hydraport Power Outlet Module – AU (FG551-31) • HPX-AV100-CS+A, Hydraport Composite with Stereo Module (FG552-10) • HPX-AV100-RGB+A, Hydraport RGBHV with Stereo Module (FG552-11) • HPX-C5400-CS+A, Hydraport Composite + Stereo UPX CAT5 Kit with HPX carrier (FG552-50-BL-K) • HPX-C5400-VGA+A, Hydraport RGBHV + Stereo UPX CAT5 Kit with HPX carrier (FG552-51-BL-K) • HPX-C5400-CN+A, Hydraport Component + Stereo UPX CAT5 Kit with HPX carrier (FG552-52-BL-K) • HPX-N100-RJ45, Hydraport Single RJ45 Module (FG553-01) • HPX-N102-RJ45, Hydraport Dual RJ45 Module (FG553-02) • HPX-N100-USB, Hydraport Single USB Module (FG553-11) • HPX-U100-BTN, Hydraport Single Button Module with LED (FG554-01) • HPX-U400-MET-6N, Hydraport Metreau 6N Kit with HPX Carrier (FG554-11-BL-K) • HPX-U400-MET-13, Hydraport Metreau 13 Kit with HPX Carrier (FG554-12-BL-K) • HPX-U400-MET-7, Hydraport Metreau 7 Kit with HPX Carrier (FG554-13-BL-K) • HPX-U400-SP-08-AX, Hydraport Novara AxLink 8-button Module (FG554-51-BL) • HPX-U400-CP-1008, Hydraport Novara ControlPad 8-button Module (FG554-71-BL) • HPX-U200-MOD, Hydraport Modero Connection Module (FG554-81)

HPX-1600 Specifications (Cont.)	
Compatibility (Cont.):	• HPX-B050, Hydraport Blank Panel - 1/2 M Height (FG558-01) • HPX-B100, Hydraport Blank Panel - 1 M Height (FG558-02) • HPX-B200, Hydraport Blank Panel - 2 M Height (FG558-03) • HPX-B050-L, Hydraport Custom Label Panel - 1/2 M Height (FG558-11) • HPX-B100-L, Hydraport Custom Label Panel - 1 M Height (FG558-12) • HPX-AC-SB, Hydraport Stop Block (FG559-01) • HPX-AC-DA, Hydraport Decora Adapter Plate (FG559-11) • HPX-AC-MB, Hydraport Accessory Mounting Bracket (FG559-21) • HPX-PAK-US, Hydraport Power Accessory Kit w/ US power cord (FG559-31) • HPX-PAK-I, Hydraport Power Accessory Kit w/ no power cord (FG559-32) • HPX-AC-TK, Hydraport Installation Tool Kit (FG559-90)
Optional Accessories:	HPX-AC-TK Hydraport Installation Tool Kit (FG559-90) see below. HPX-AC-HSP Hydraport Spring Kit for Heavy Loads (FG559-42)
Certifications:	UL 962A *(N America versions only)*

HPX-AC-TK Hydraport Installation Tool Kit (FG559-90)	
Quantity	Description
(1)	HPX-AC-TMPLT 559-91 router template
(4)	Mounting Strips ***Note**: The Mounting Strips are manufactured by 3M™.* *The 3M part number is "17021P".*
(1)	Router bit (Freud 12-128 or Whiteside 1072)
(1)	Guide Bushing (Woodcraft 144693)
(1)	Lock Nut (Woodcraft 144696)
(1)	Installation Guide

HPX-1600 Exploded View

FIG. 2 provides an exploded view of the HPX-1600 Hydraport System, with the main components referenced in this document labelled. Use this diagram for reference while following the instructions provided in this document.

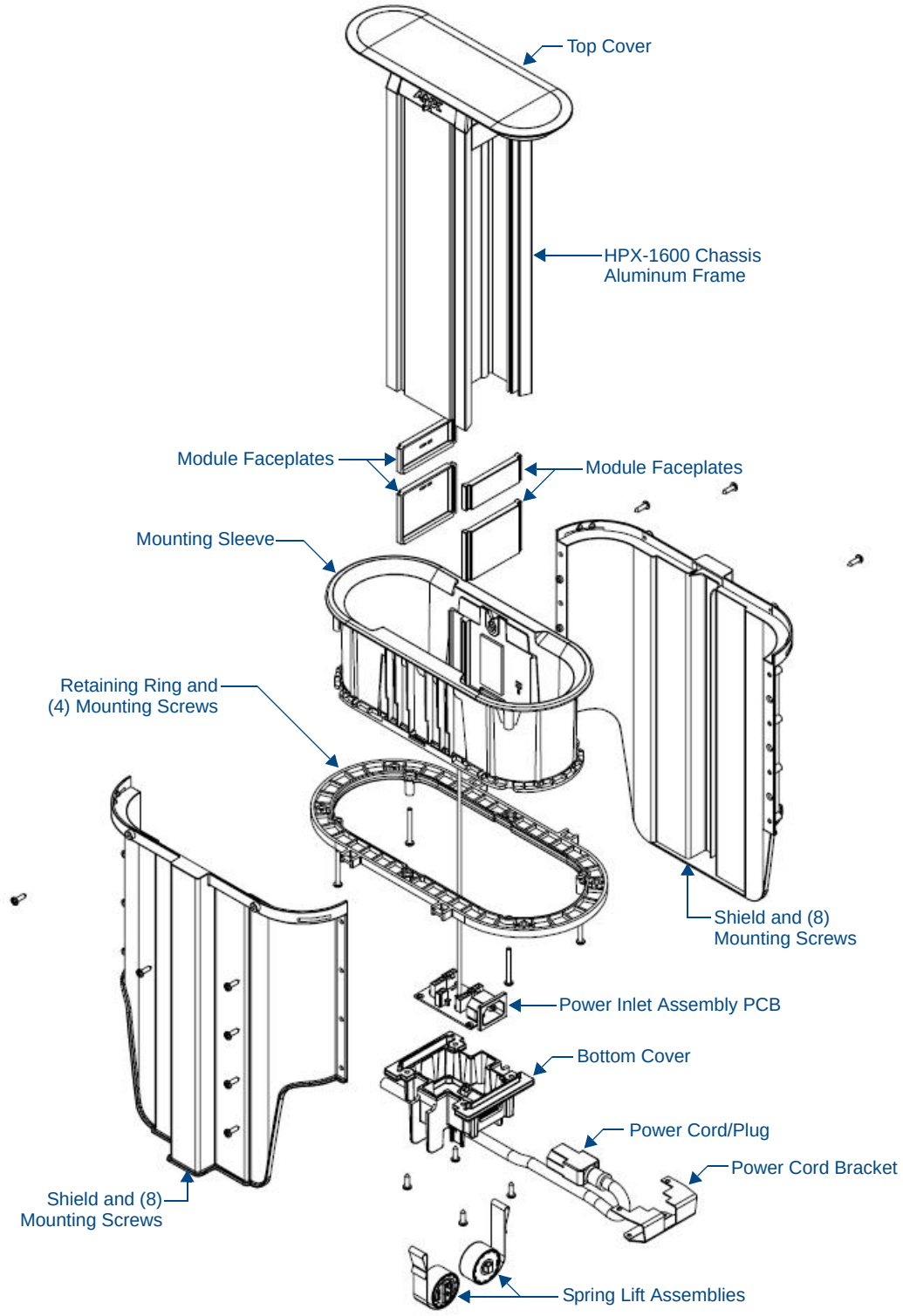


FIG. 2 HPX-1600 Exploded View

Installing the HPX-1600

ATTENTION READ THIS FIRST!

CAUTION

Only a professional, AMX-qualified installer should perform this installation.
Installation must conform to all local codes.
This product may not be installed by the end-user.

A typical installation will include several of various available modules listed in the *Product Specifications* section on page 2. Each of these modules has specific instructions for terminating their rear connections. Refer to the installation guide for each appropriate module during the installation of the Hydraport system.

- Read these instructions in their entirety before beginning the installation.
- The installation requires specific steps to be performed the specified order.

Step 1 - Select an Installation Location

Note the space requirements for installing the system. FIG. 3 provides a dimensioned drawing of the HPX-1600 System (above and below the table).

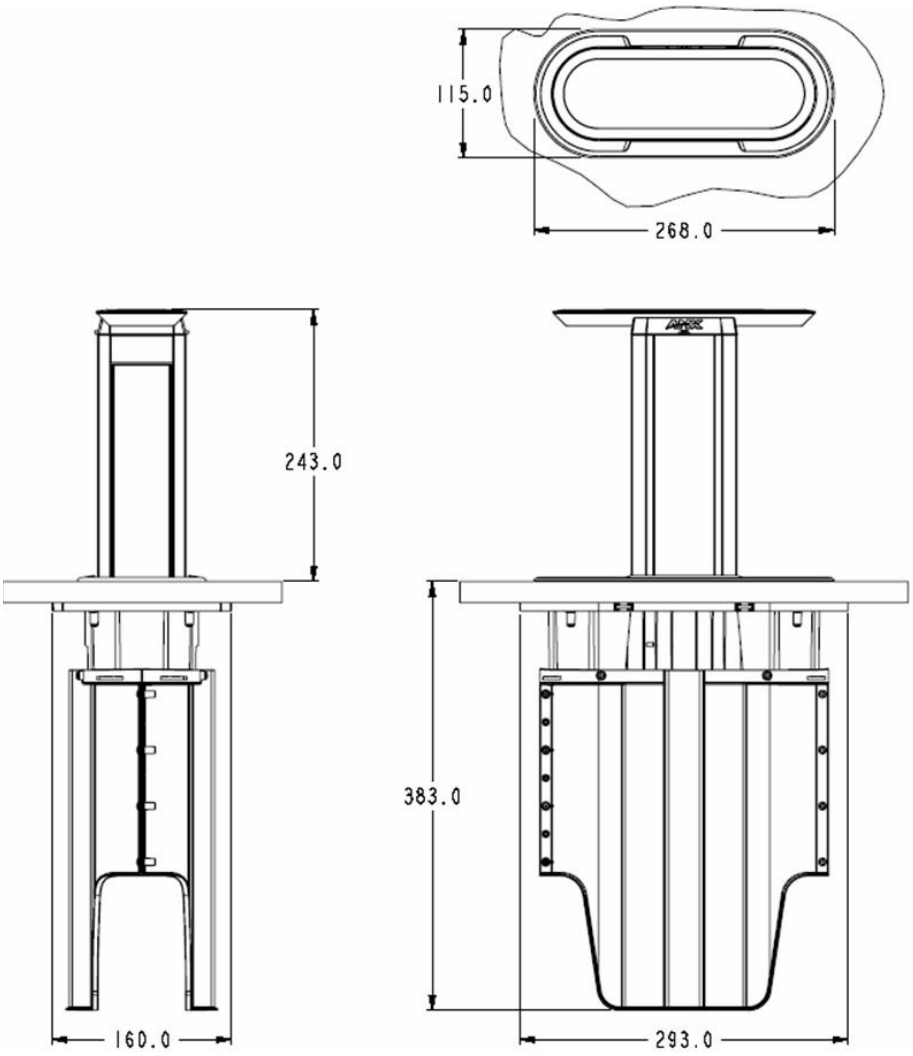


FIG. 3 HPX-1600 Space Requirements

Installation Location Notes

- The Hydraport system requires a mounting surface from 19mm (.75in) to 50mm (2.0in) thick.
- The Hydraport system requires at least 383mm x 293mm x 159mm (zzin x xxin x yyin) of space below the mounting surface.
- If the system is to be mounted within a column, pillar or other enclosed space below the mounting surface, please note that final assembly and termination will require the installer to have access to this space below the mounting surface.

Care should also be taken to ensure that the system does not interfere with the normal use of the work space.

For example, on a table or work surface, ensure that the system does not interfere with the user's legs when they are seated at the table. Even when the system is deployed in the up position, the mounting system and shields occupy the entire space requirement below the table.

Step 2 - Cut the Hole In the Mounting Surface

Use the HPX-AC-TK (FG559-90) and a suitable router with ½" arbor to create the hole in the mounting surface. FIG. 4 provides the hole cutout dimensions for reference:

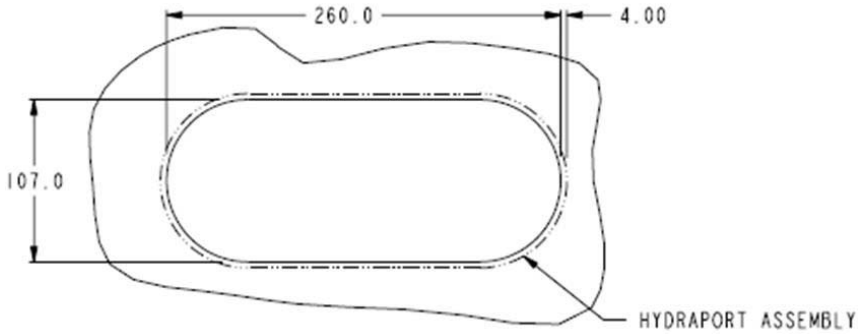


FIG. 4 Hole Cutout Dimensions

1. Carefully measure the tabletop or other mounting surface to locate the desired position of the Hydraport unit.
2. Apply the included double-sided tape mounting strips to the bottom surface of the HPX-AC-T router template, making sure that the rounded edges of the mounting strips protrude slightly beyond the edges of the template (see FIG. 5).
3. Use the alignment marks scribed on the template to align the template properly on the mounting surface (FIG. 5).

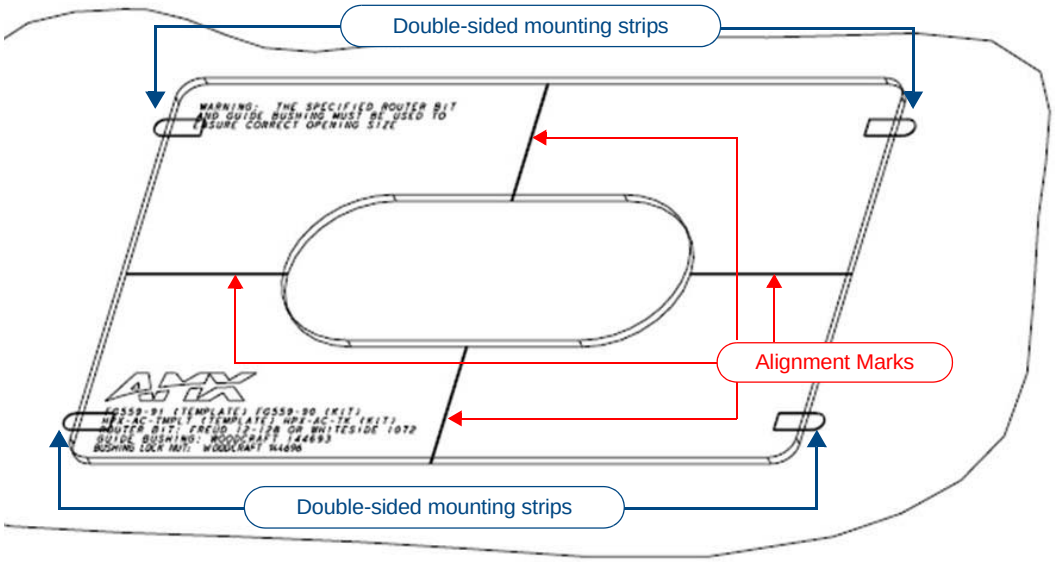


FIG. 5 HPX-AC-T Router Template

- Note that due to the guide bushing and router bit, the final cutout will be smaller than the opening in the template. The cutout in the mounting surface will be offset to the inside of the template opening by 1/8th inch (3.2 mm) on all sides.
- Note both the position and orientation of the template relative to the table top or other mounting surface.
- Note that very little clearance exists between the Hydraport assembly and the hole cutout in the mounting surface. Take care to align the cutout carefully with the edges or other appropriate features in the table or mounting surface. If the cutout is misaligned, the installed unit will be misaligned.

Ensure the template is held securely on the mounting surface. If the template moves during the cutting process, the cutout will be enlarged and will likely exceed the trim bezel of the Hydraport base assembly, requiring extensive repair to the mounting surface.

4. Install the router guide bushing into the base of a suitable router.
   - The router should be equipped with a ½ inch (12.2mm) collet and a baseplate capable of accepting a standard 1 3/16 inch (30.2mm) guide bushing.
   - Install the router bit into the router with an appropriate portion of the bit exposed below the guide bushing.
5. Switch the router on and carefully lower (plunge) the router bit into the mounting surface within the template opening.
6. Move the router against the template opening such that the guide bushing follows along the template opening.
7. Carefully follow the template opening with the guide bushing in a clockwise fashion such that the cutting action of the router bit is acting against the motion of the router.
8. Make several passes with the router, guide bushing and router bit.
9. Lower the router bit in small increments to remove a suitable amount of material on each pass.

Trying to cut too deep in any one pass may result in damage to the mounting surface.

- Take care to ensure that the top surface of the mounting surface is not damaged beyond the width of the trim bezel as the cutout is made.
- Make sure the bit or cutting tool used is appropriate for the material to be cut and will not tear or chip the top surface.
- AMX does NOT recommend using a Jigsaw to make the final cutout.
- Note that the process of making the cutout will create substantial dust and prepare the environment appropriately.

10. Finally, remove template by pulling firmly on the rounded edges of the double-sided tape mounting strips until they release from the tabletop and template.

Step 3 - Prepare the Terminations

Some modules that are included in the final system require some type of backside termination. Refer to the installation guide for each module to determine the required backside termination.

NOTE

The backside termination for each module can and should be completed before the module is installed into HPX Base assembly.

FIG. 6 provides two example illustrations of module backside termination.

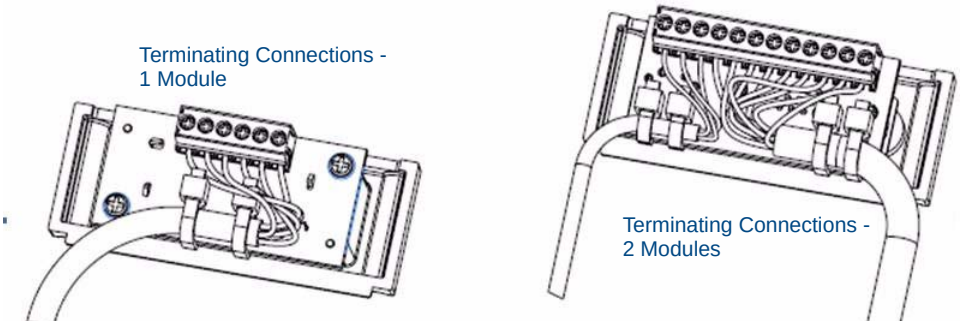


FIG. 6 Terminating Connections of 1 or 2 HPX Modules

Note that for terminations for which the far end of the cable is not accessible either because the cable has been run under carpet, in a conduit or structure, or is otherwise fixed, the cable must be placed through the retaining ring, (note the orientation of the retaining ring - see FIG. 8 on page 11) then through the mounting surface from bottom to top, then to the module before the module is placed into the base assembly, as shown in FIG. 7:

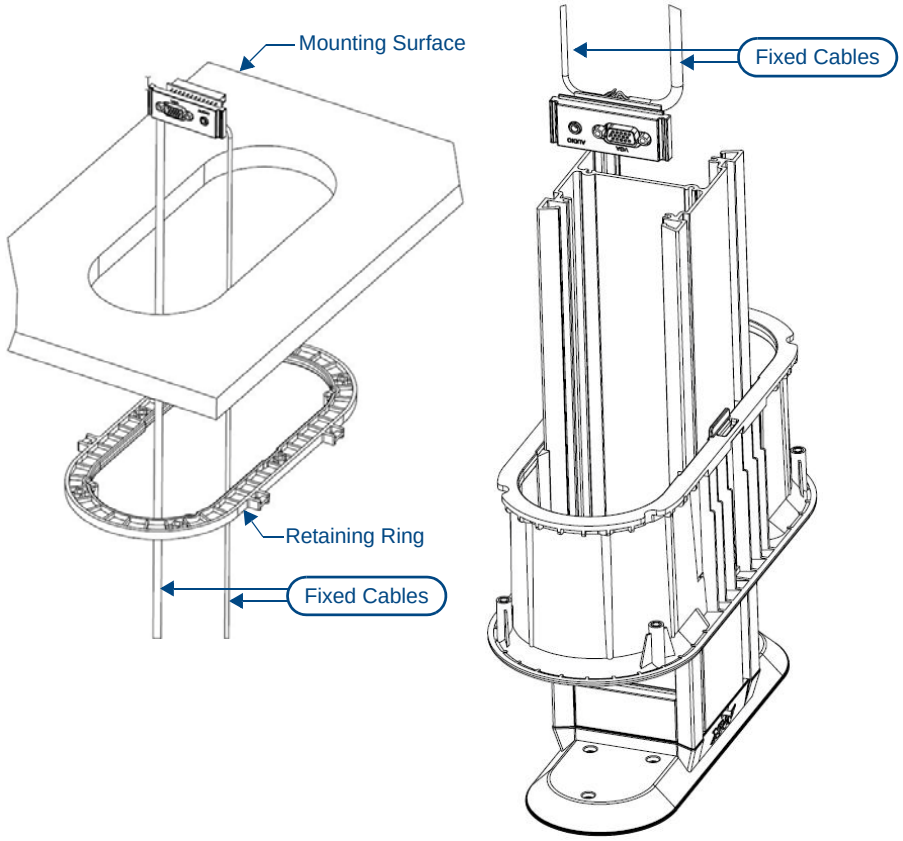


FIG. 7 Fixed Cable Passing Through Ring, Table and Into the HPX-1600 Assembly

Note the direction of the screw bosses, as indicated in FIG. 8:

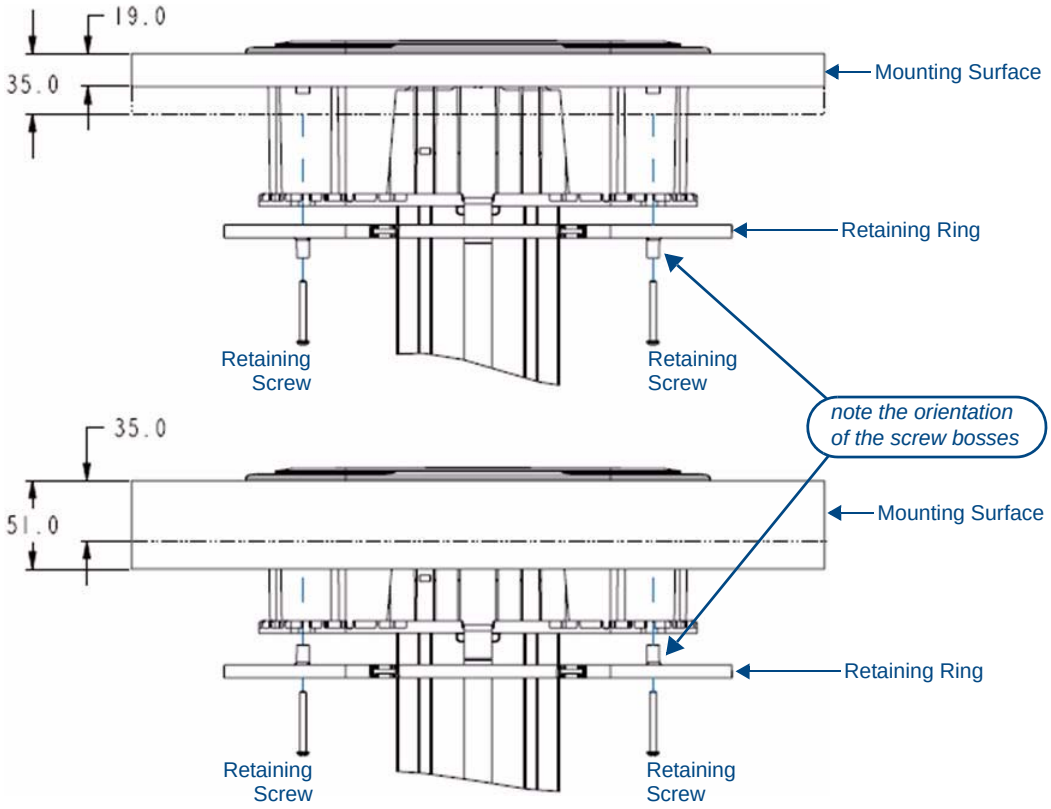


FIG. 8 Direction of the Screw-Bosses, based on surface thickness (19mm vs. >19mm thick)

For mounting surfaces less than 35mm thick, orient the screw bosses away form the main assembly (down). For mounting surfaces greater than 35mm thick orient the screw bosses toward the main assembly (up).

Step 4 - Insert the Modules

NOTE

See Step 4.6 for the installation of High Voltage Isolators (HPX-PA-HVI) These Isolators must be installed properly to maintain product safety certifications.

NOTE

All Low-Voltage, Secondary-Circuit (LVSC) Modules must be installed above the AC Power Outlets and Circuit Breaker Modules in the HPX-1600 Base Assembly. The LVSC Modules will therefor be installed first.

1. Latch the system in the closed (down) position.
2. Place the HPX-1600 Base assembly upside down on a suitable surface to ensure the top cover is not scratched.
3. Remove the four Mounting Screws that secure the Bottom Cover to the aluminum frame, and remove the bottom cover. (FIG. 9).

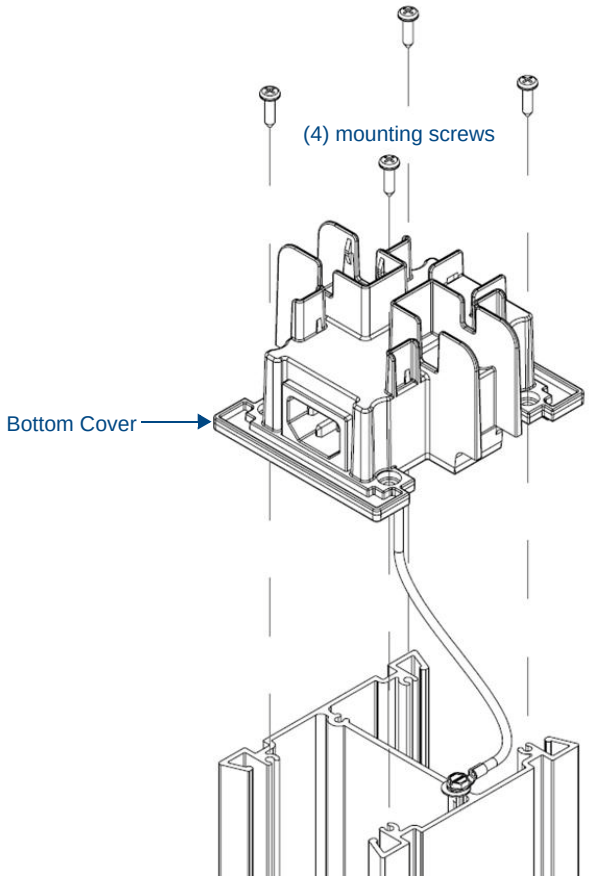


FIG. 9 Installing the Bottom Cover

4. Slide the pre-terminate modules one at a time into the Base assembly.

   Note the orientation of each module: a small tab exists on the bottom side (shown facing up in FIG. 10) of the faceplate of each module. Ensure this tab is facing the bottom side of the system (see FIG. 11 on page 14).

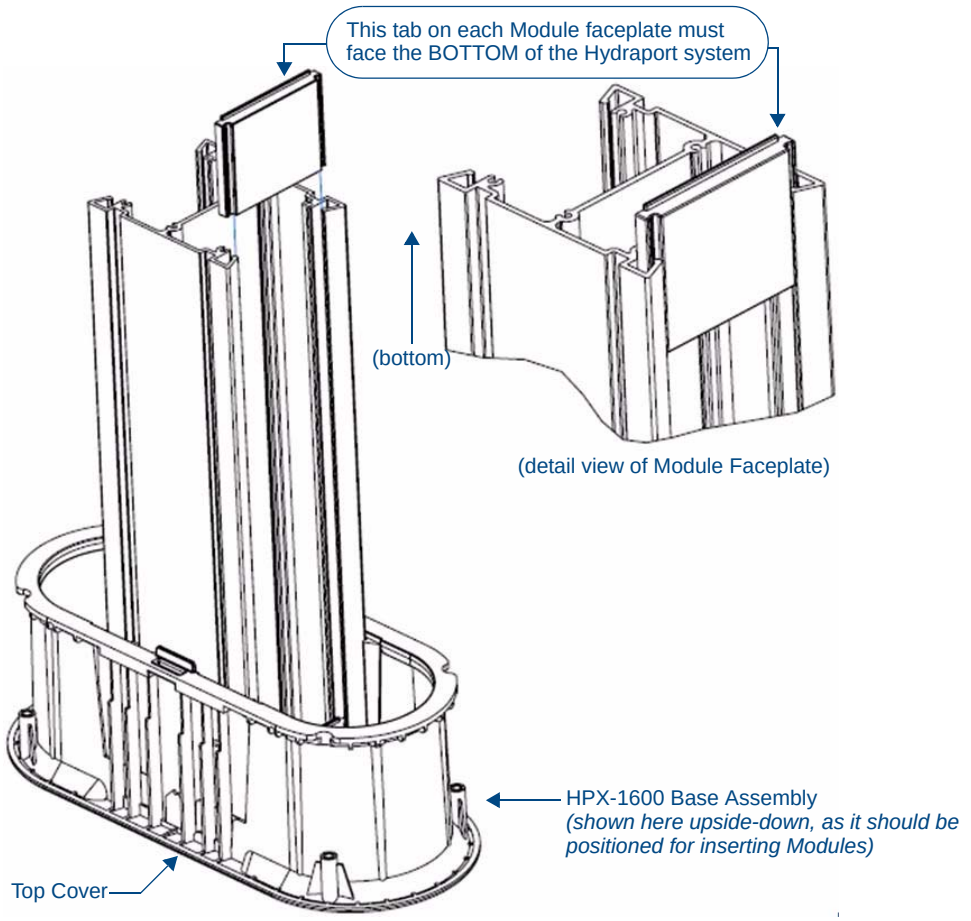
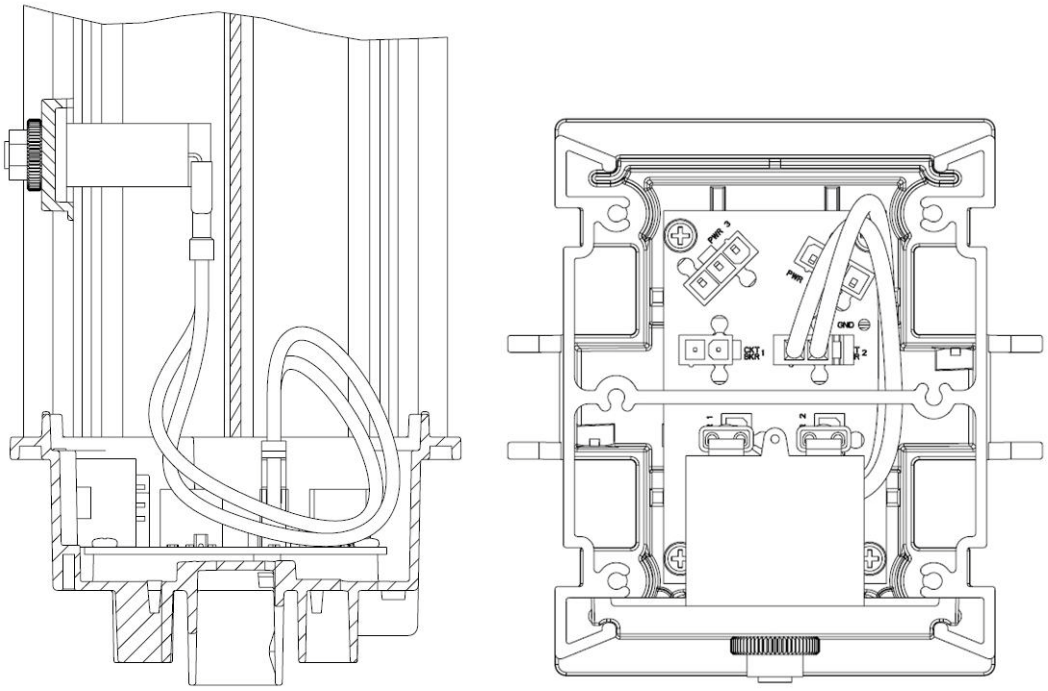

This tab on each Module faceplate must face the BOTTOM of the Hydraport system
(bottom)
(detail view of Module Faceplate)
HPX-1600 Base Assembly
(shown here upside-down, as it should be positioned for inserting Modules)
Top Cover

FIG. 10 Inserting Modules Into the HPX-1600 Base Assembly

5. Route the cables from each module out the bottom (currently facing up) of the base assembly.
6. If both low-voltage, secondary circuit (LVSC) modules and AC Power Outlets will be installed, place the (LVSC) modules in the upper portion of the chassis first, followed by the AC Power Outlets in the lower portion of the chassis.
   - The LVSC Modules and the AC Power Outlets must be separated by the High Voltage Isolators provided in this kit.
   - See the Instructions provided with the High Voltage Isolators for detailed installation instructions.
7. For AC power modules, plug the provided wire harness into the Power Inlet assembly inside the bottom cover (FIG. 11).



Cross-section view of Bottom Cover showing cable routing

Bottom Cover (inside view)

FIG. 11 Bottom Cover - Connect each AC power module to the power inlet assembly

8. The included circuit breaker modules should also be connected to the Power Inlet assembly at this time.

NOTE

International units (FG550-BL, FG550-SL) include two circuit breakers for line and neutral. Both circuit breakers are required for operation. Take care while routing the wires to the circuit breaker positioned on the opposite side of the chassis from the two circuit breaker connectors on the Power Inlet assembly(see FIG. 11)

Refer to the Installation Guides provided with each Module for detailed installation instructions.

Step 5 - Install the Bottom Cover

Once all of the desired modules are installed, complete each face of the system with blank modules.

At least 3M (3") of blank modules will be used at the bottom of the system to correspond to that portion of the system that is always below the mounting surface, even when the system is deployed in the up position (FIG. 12).

The 10A Circuit Breaker provided in HPX-PAK-xx can be used to occupy one of these positions.

If a Stop Block (FG559-01) is used to limit the travel of the system in the Up position, 2M (2") of Blank modules will be used above the Stop Block and below the mounting surface.

The 10A Circuit Breaker provided in HPX-PAK-xx can be used to occupy one of these positions. .

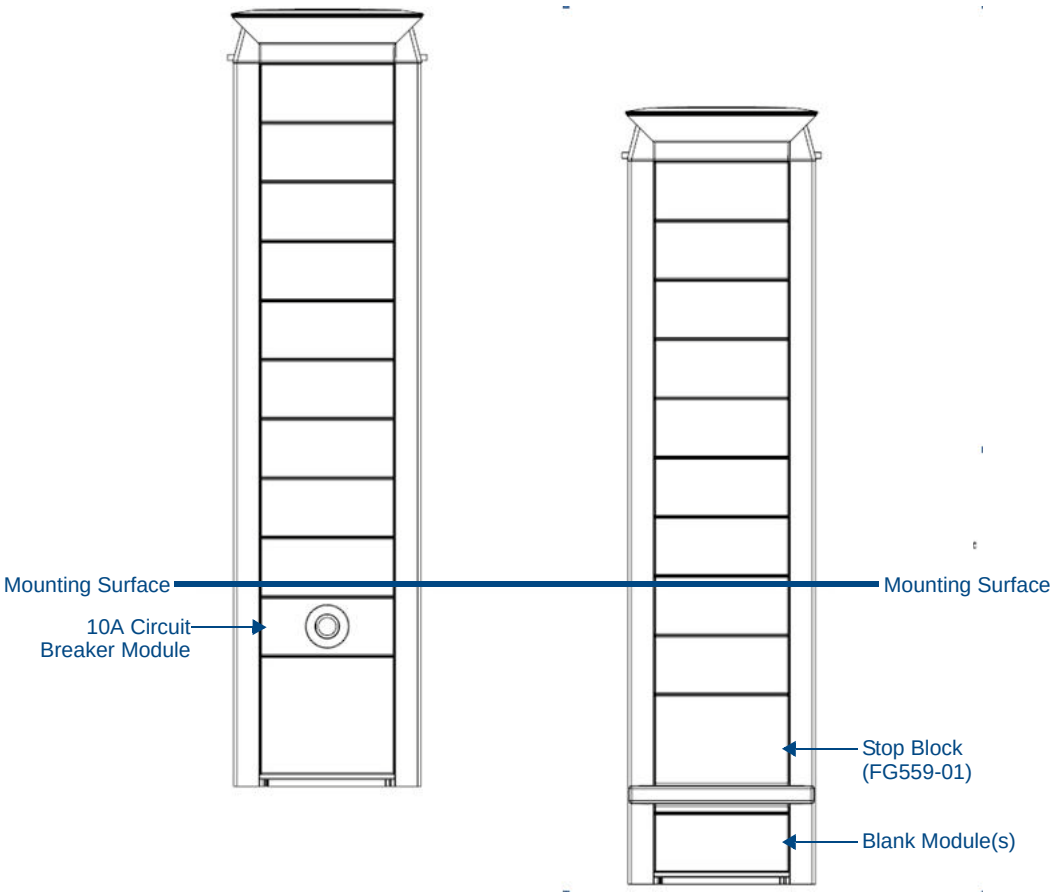


FIG. 12 Install Blank Modules at the Bottom of the System

Once each face of the system is fully occupied with active or blank modules, install the bottom cover.

1. Ensure each AC power module is connected to the power inlet assembly and that the circuit breaker is also connected to the power inlet assembly (FIG. 13).

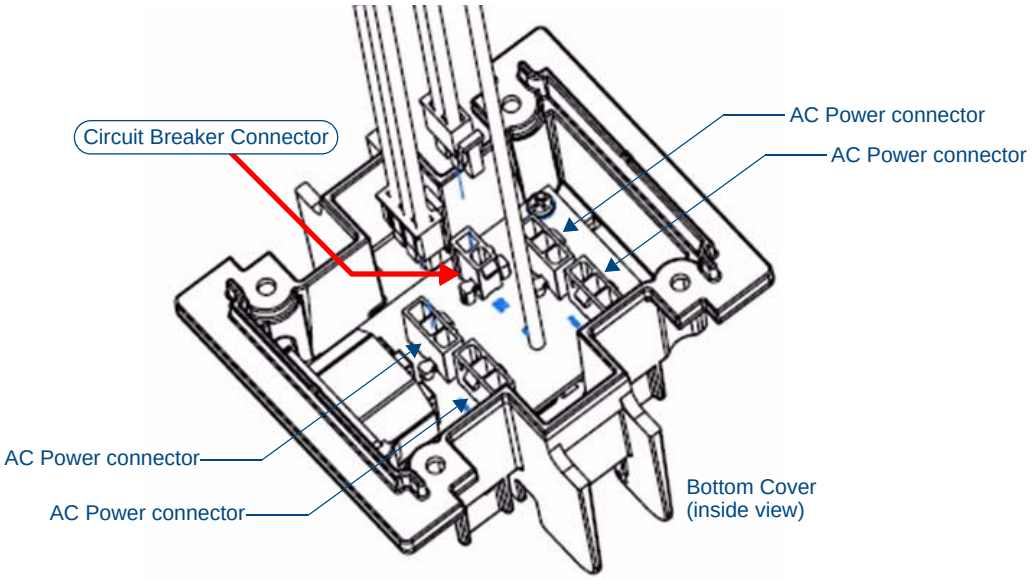


FIG. 13 Bottom Cover - Connect each AC power module to the power inlet assembly

2. Ensure the Power Inlet Assembly Chassis Ground Lug is secured tightly to the HPX-1600 Chassis using the included grounding screw (FIG. 14).

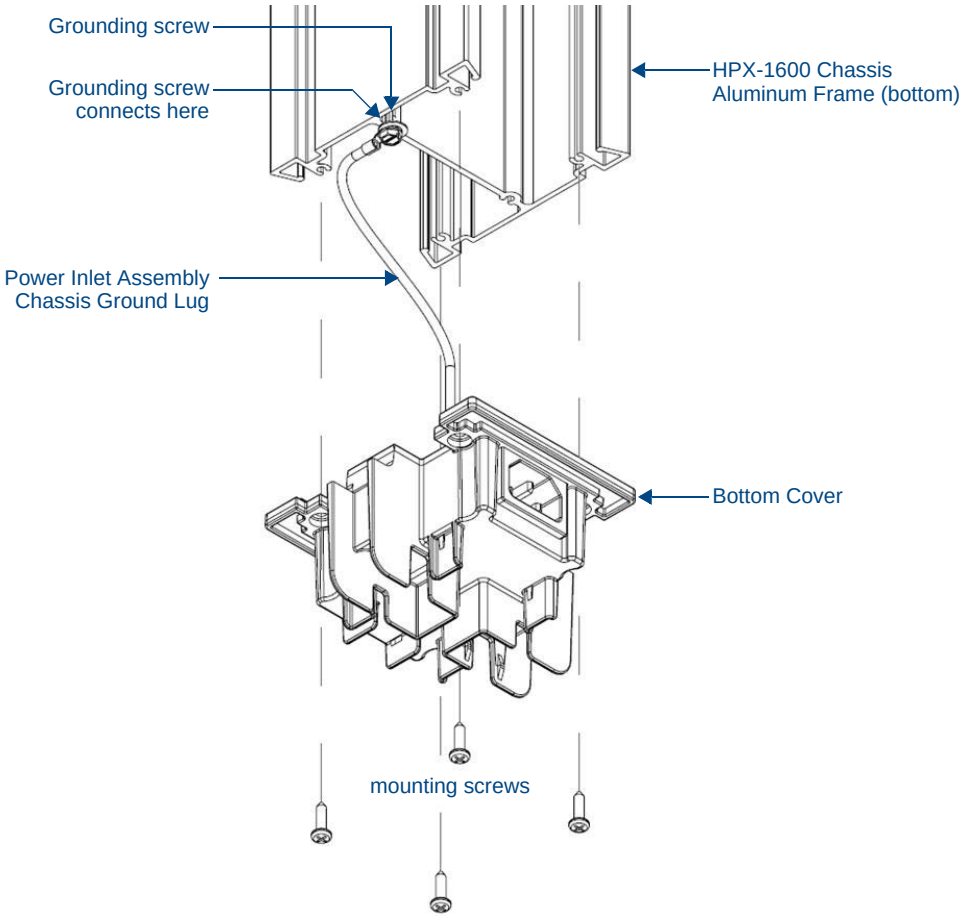


FIG. 14 Installing the Bottom Cover

3. Route the remaining cables out of the bottom cover using the four square holes provided in the bottom cover.

4. Secure the bottom cover to the aluminum frame using the four provided screws.
5. Secure the cables exiting the bottom cover using the provided wire ties (FIG. 15).

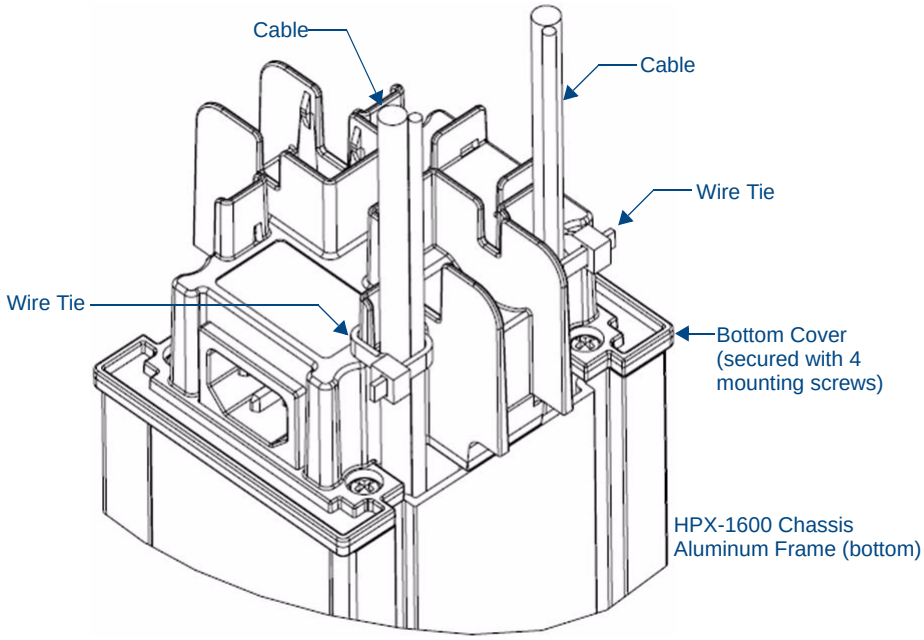


FIG. 15 Bottom Cover - Installed With Cables Exiting and Secured

Step 6 - Install the Lift Spring Assemblies

***ATTENTION**: If modules have been installed in more than 50% of the available space, the performance of the HPX-1600 retract mechanism may benefit from the installation of the optional accessory HPX-AC-HSP (FG559-42). See the installation guide for HPX-AC-HSP for further details.*

After the bottom cover is fully secure and the exiting cables are secured:

1. Clip both lift spring assemblies onto the mounting sleeve.
2. Ensure the lift spring assembly is oriented properly (FIG. 16).

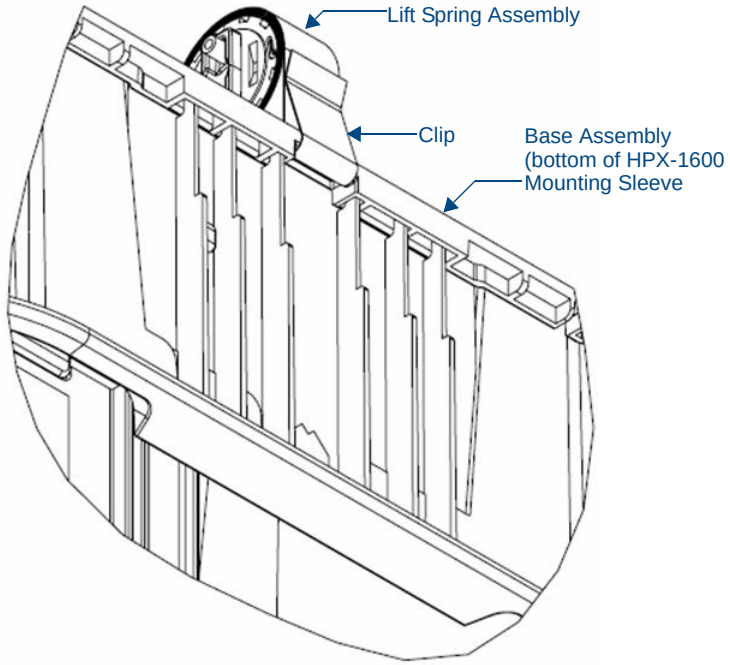


FIG. 16 Lift spring assembly clipped to main sleeve

3. Unlatch the sliding frame and mounting sleeve so the sleeve is free to slide relative to the frame.
4. Slide the mounting sleeve so that it is nearest to the bottom cover.
5. Take hold of the body of one lift spring assembly and pull it firmly up so that it can be snapped into the provided slot in the bottom cover (FIG. 17).

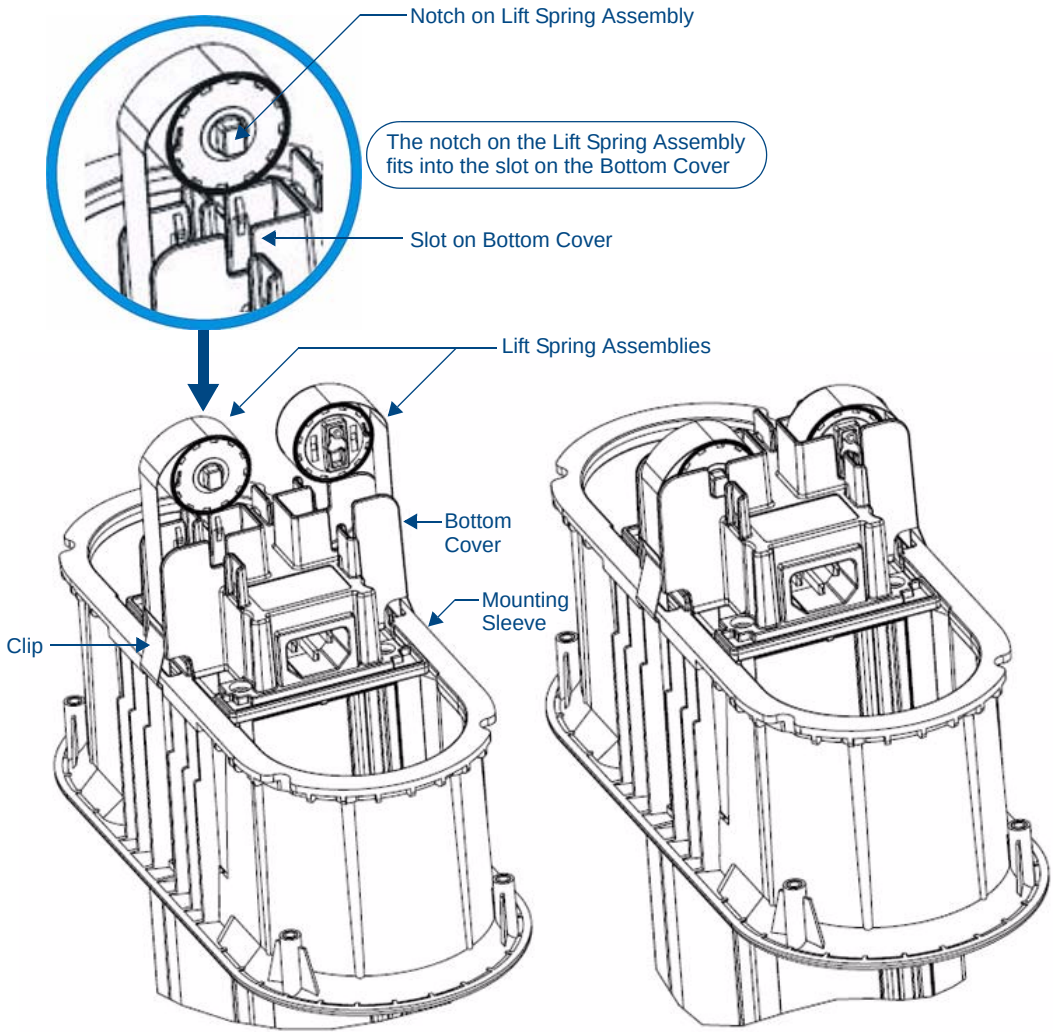

Notch on Lift Spring Assembly
The notch on the Lift Spring Assembly fits into the slot on the Bottom Cover
Slot on Bottom Cover
Lift Spring Assemblies
Bottom Cover
Mounting Sleeve
Clip

FIG. 17 Inserting the Lift Spring Assembly Into the Bottom Cover

6. Repeat for the second lift spring assembly
7. Slide the mounting sleeve towards the top of the unit until the unit latches in the closed position.

Step 7 - Install the System Into the Mounting Surface

Turn the system over and install the unit into the cutout in the mounting surface (FIG. 18).

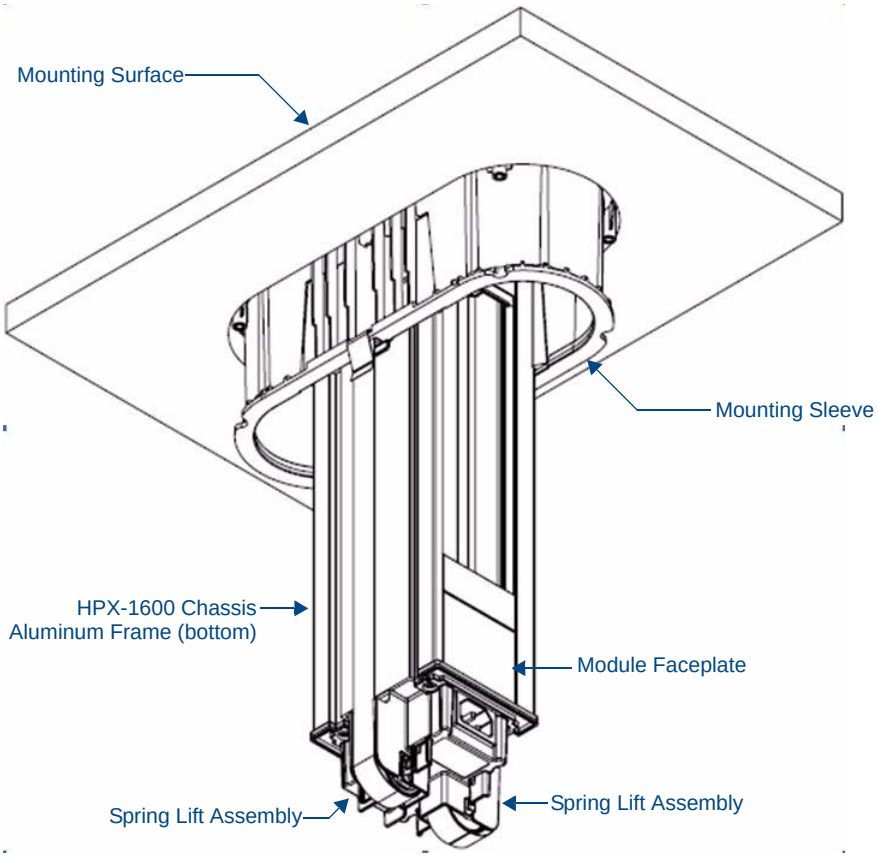


FIG. 18 Completed Assembly Latched In the Closed Position

- Make sure that all cables from the backside terminations pass through the cutout.
- Note that any fixed cables should already be passed through both the mounting surface and retaining ring (see the *Step 3 - Prepare the Terminations* section on page 10).

Step 8 - Install the Retaining Ring

1. Insert the four #6-32 x 1 3/8 retaining screws into the retaining ring.

   Note the orientation of the retaining ring. This orientation changes in order to accommodate the various thicknesses of mounting surfaces (see FIG. 8 on page 11).

NOTE

Note the direction of the screw bosses.
*For mounting surfaces **less than 35mm thick**, orient the screw bosses away form the main assembly (down).*
*For mounting surfaces **greater than 35mm thick** orient the screw bosses toward the main assembly (up).*

2. Place the retaining ring over the lower portion of the base assembly and against the underside of the mounting surface.
3. If an accessory mounting bracket HPX-AC-MB (FG559-21) is to be used, install it now by trapping it between the retaining ring and mounting surface (FIG. 19).

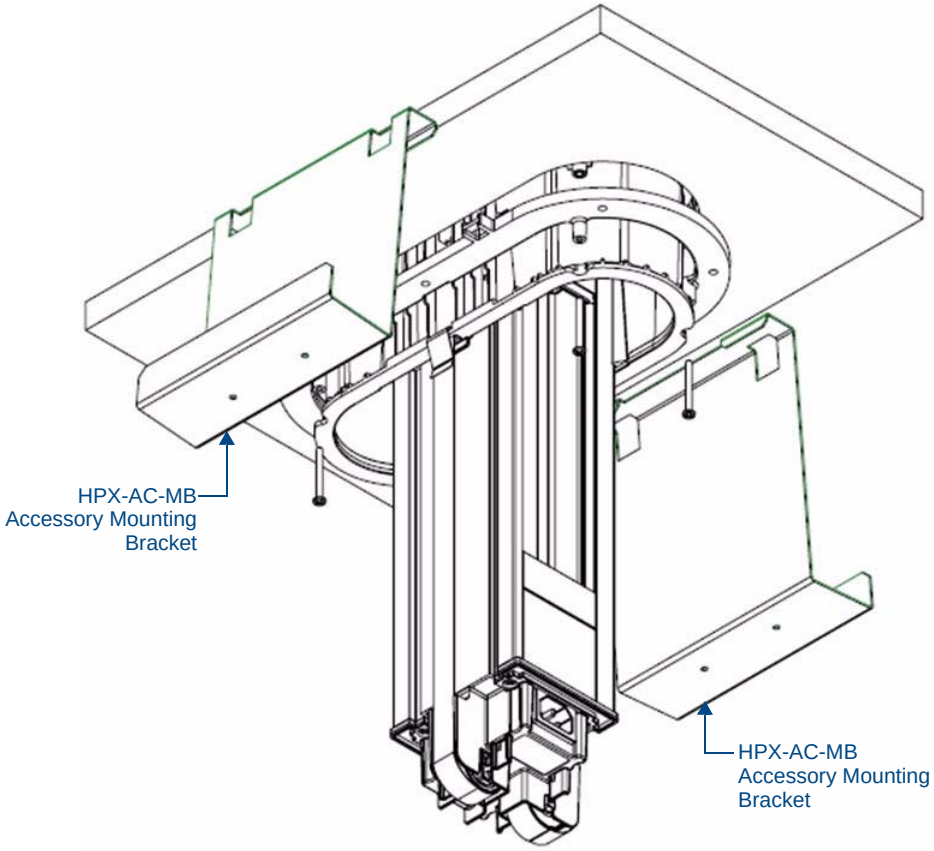


FIG. 19 Installing HPX-AC-MB Accessory Mounting Brackets

4. Gradually tighten the four retaining screws to secure the unit in the mounting surface.
   - Ensure the unit is properly aligned in the mounting surface.
   - Torque the retaining screws to approximately 3 in-lbs.
   - Do not over tighten the screws.
5. After tightening the retaining screws ensure the unit moves smoothly up and down.
   - Over tightening the retaining screws can cause the system to bind.
   - If the system binds, gradually loosen the retaining screws until it operates smoothly.

FIG. 20 on page 22 shows the HPX-1600 Unit installed in to the mounting surface:

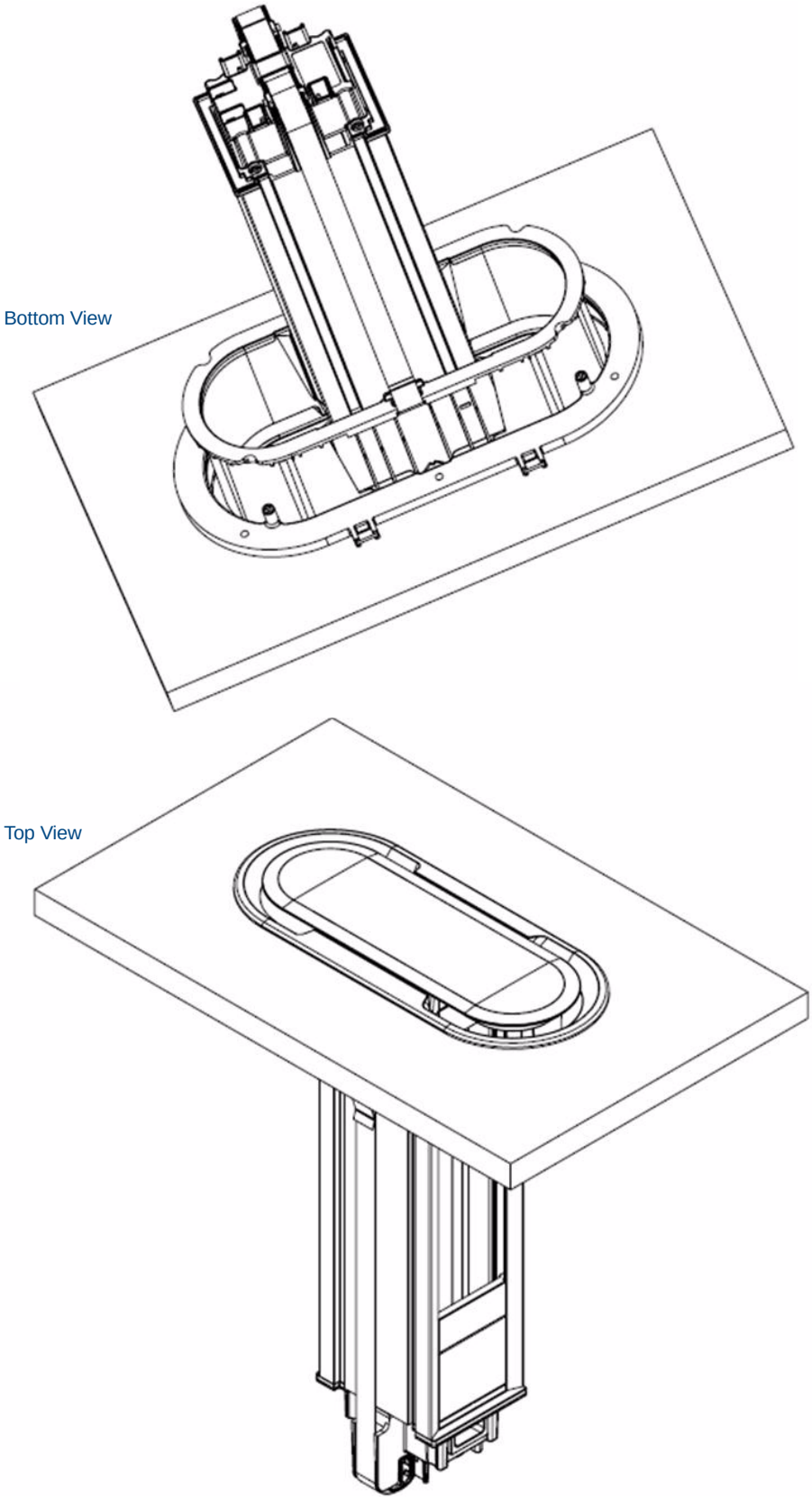


FIG. 20 HPX-1600 Installed in mounting surface

Step 9 - Install Power Cord (If Required)

If AC power modules are to be used in International models (FG550-BL, FG550-SL), install a suitable 14AWG power cord into the provided IEC 320 C14 socket.

North American models (FG550-01-BL, FG550-01-SL) include a pre-attached power cord with metal retention bracket. If this bracket has been removed during installation, reinstall it at this time. The metal retention bracket is required to maintain North American Product Safety Certifications.

Fold the power cord back 180 degrees, and secure it to the far side of the bottom cover using the supplied wire ties. (FIG. 21).

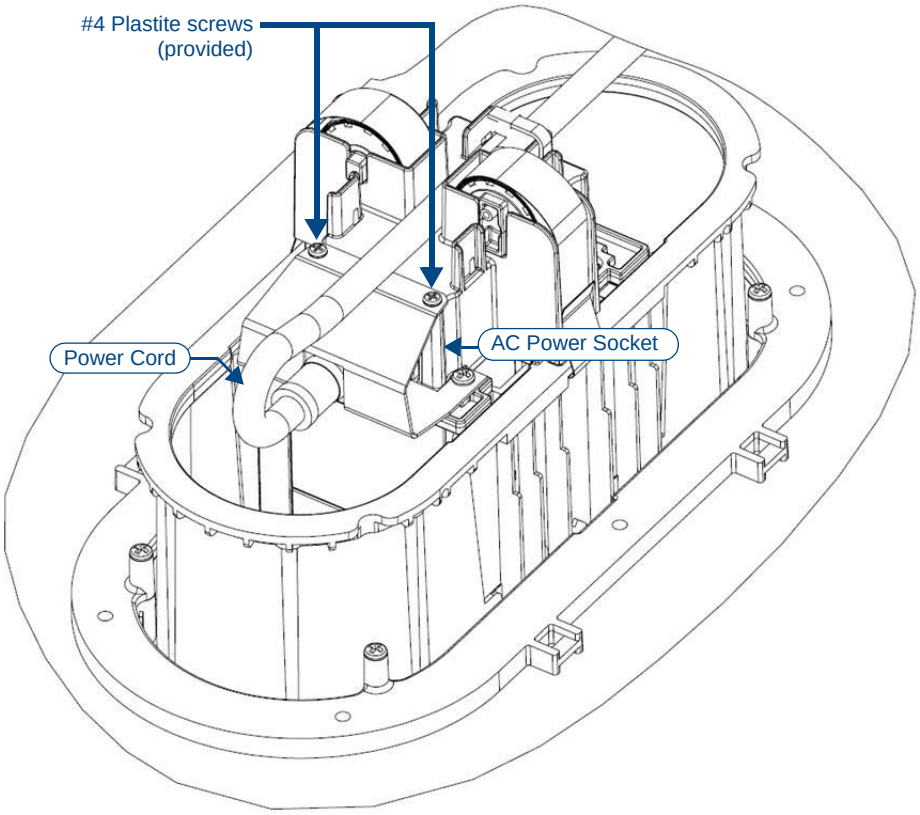


FIG. 21 Installing the Power Cord

NOTE

Insure the resulting service loop is tight enough so that it does not rub the shields when the unit moves up and down.

Step 10 - Install Shields

1. Secure the two shields to each other using the 8 supplied screws.
   Ensure that any fixed cables pass through the assembled shield appropriately.
2. Snap the assembled shield onto the lower portion of the mounting sleeve.
3. Install the four additional mounting screws into the top of the shield to secure the shield to the mounting sleeve (FIG. 22).

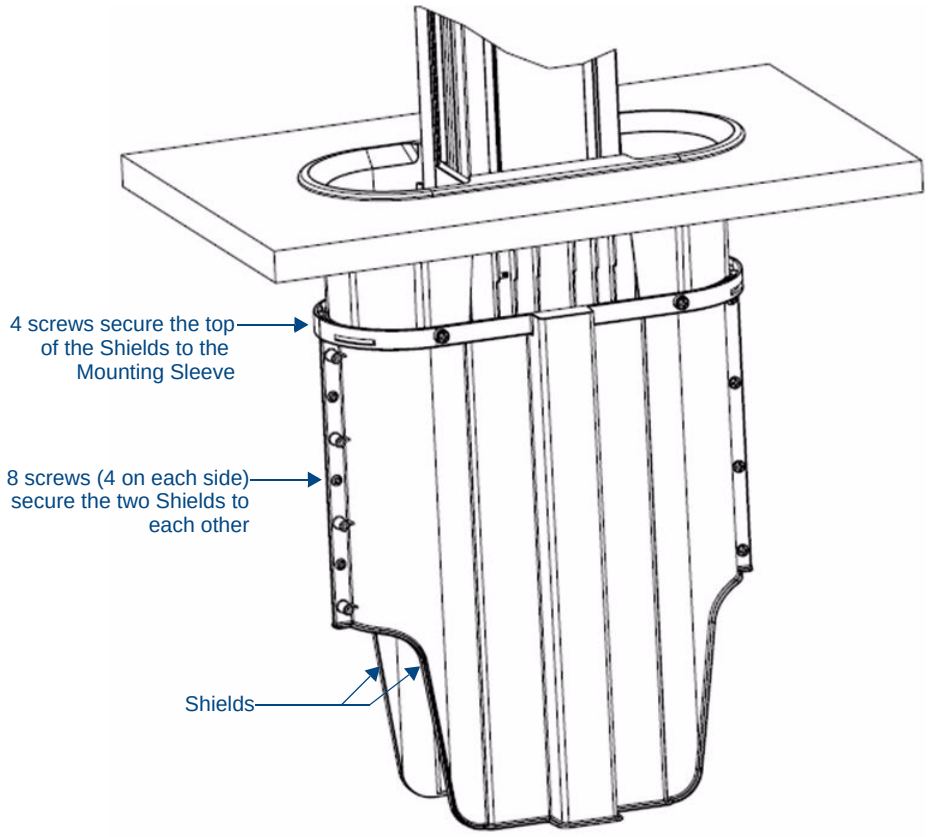

4 screws secure the top of the Shields to the Mounting Sleeve
8 screws (4 on each side) secure the two Shields to each other
Shields

FIG. 22 Installing the Shields

Step 11 - Secure Cables

Terminate the backside connections as required for each cable exiting bottom of the HPX-1600.

Secure these cables and the power cable to the four tabs provided on the retaining ring using the supplied wire ties (FIG. 23).

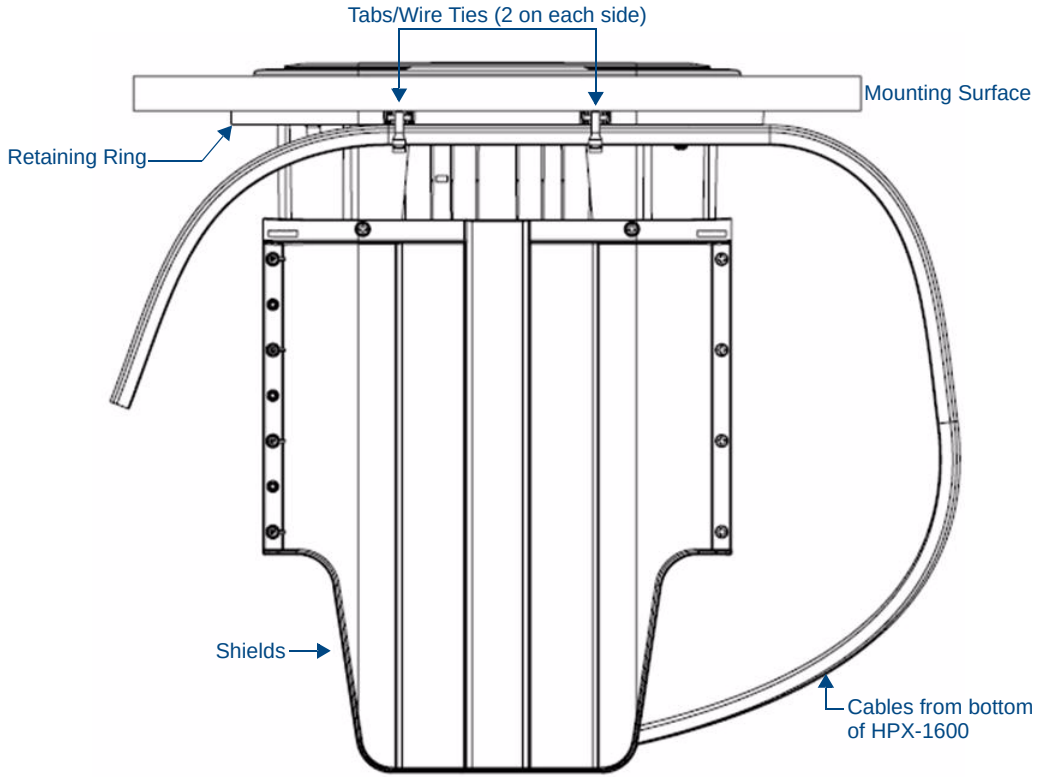


FIG. 23 Secured Service Loop

- Ensure there is sufficient service loop to allow the system to travel in its full range of motion.
- Avoid excess service loop as this can place significant weight on the sliding and lifting mechanism and prevent the system from functioning properly.
- Ensure the service loop does not catch on the shields or any other obstruction and is away from users who might kick or snag the cables.
- Secure the cables in at least one additional location after they have been secured to the retaining ring so as to prevent undue stress on the system if the cables are inadvertently kicked, snagged or pulled.

HPX-P200-xx Power Outlet Module

Overview

The HPX-P200-xx Hydraport Power Outlet Module is designed to be used in conjunction with the HPX-1600 Hydraport Base Assembly. The HPX-P200-XX Power Outlet Assembly provides user accessible AC "Mains" Power to the front panel of the Hydraport System (FIG. 24).

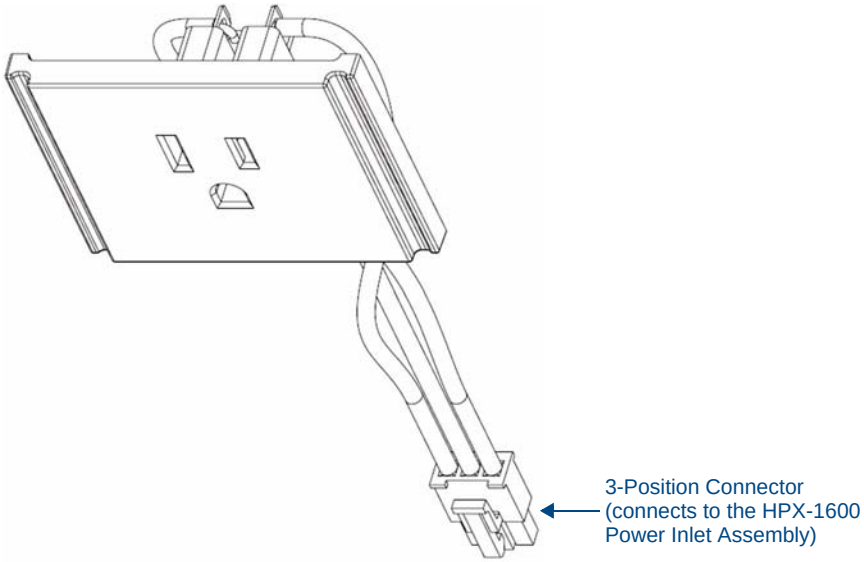


FIG. 24 HPX-P200-xx Hydraport Power Outlet Module (HPX-P200-US shown)

NOTE

The Hydraport System limits the total available current for all Power Outlet Modules to 10 Amps total.

AMX offers four versions of the Hydraport Power Outlet Module, all compatible with the HPX-1600 Base Assembly (see the *Product Specifications* section on page 27).

Product Specifications

HPX-P200-XX Specifications	
Models Available:	
HPX-P200-US	North America / Japan (FG-551-01)
HPX-P200-EU	European Union (FG-551-11)
HPX-P200-UK	United Kingdom (FG -551-21
HPX-P200-AU	Australia / China (FG-551-31)
Dimensions (HWD):	
• HPX-P200-US	67mm x 52mm x 40mm (zzin x xxin x yyin)
• HPX-P200-EU	67mm x 52mm x 38mm (zzin x xxin x yyin)
• HPX-P200-UK	67mm x 65mm x 27mm (zzin x xxin x yyin)
• HPX-P200-AU	67mm x52mm x 30mm (zzin x xxin x yyin)
Cable Length (All)	300mm (12.0in)

HPX-P200-XX Specifications (Cont.)	
Weight:	
• HPX-P200-US	60g (2.12 oz.)
• HPX-P200-EU	69g (2.43 oz.)
• HPX-P200-UK	74g (2.61 oz.)
• HPX-P200-AU	60g (2.12 oz.)
Enclosure:	Matt black finished face plate (Polycarbonate plastic).
Rear Connections:	Three position plug-in connector for use with HPX-1600 Hydraport Base Assembly.
Compatibility:	• HPX-1600 Hydraport Base Assembly • HPX-PAK-US, Hydraport Power Accessory Kit w/ US power cord (FG559-31) • HPX-PAK-I, Hydraport Power Accessory Kit w/ no power cord (FG559-32)
Included Accessories:	Quick start guide

Installing the HPX-P200-XX Power Outlet Module

Disconnect the IEC C-14 Power Inlet Connector On the Hydraport Base Assembly

CAUTION

Ensure that the AC Power cord is disconnected from IEC C-14 power inlet connector on the Hydraport Base Assembly prior to disassembly of the Hydraport Base assembly or installation of the HPX-P200-XX Power Outlet Module (see FIG. 25).

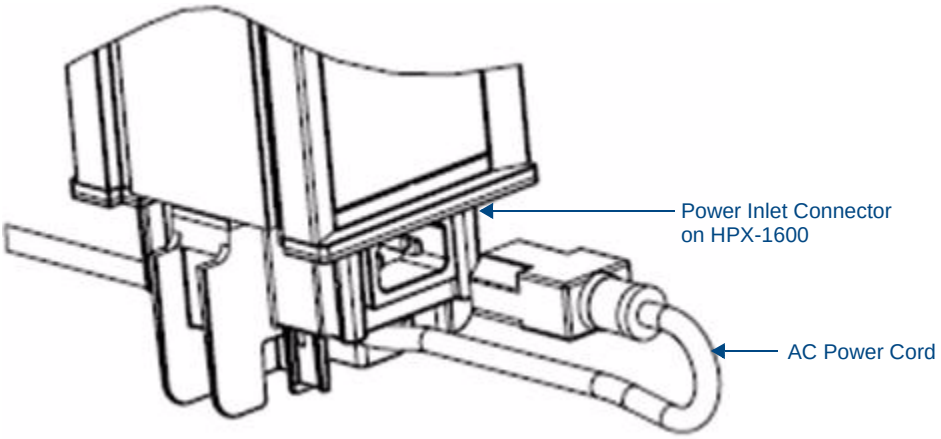


FIG. 25 HPX-1600 - Power Inlet Cord Removed

Step 1 - Connect the HPX-P200-xx to the HPX-1600 Power Inlet Assembly

Plug the 3-Position Connector from the Power Outlet Module into the Power Inlet Assembly located in the bottom cover of the HPX-1600 Base Assembly (FIG. 26).

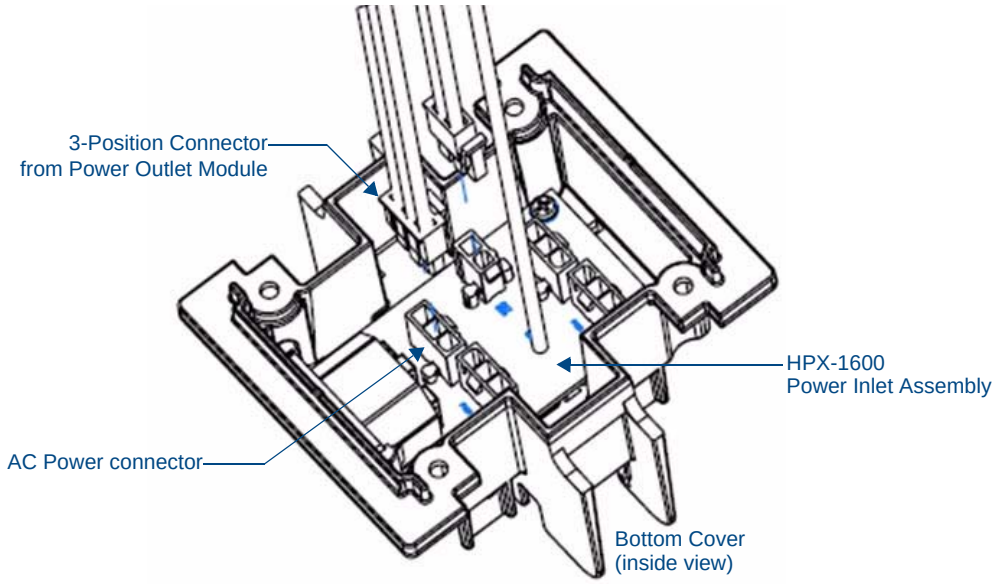


FIG. 26 HPX-1600 Bottom Cover - Connect Power Outlet Module to Power Inlet Assembly

Step 2 - Insert the Power Outlet Module Into the HPX-1600 Chassis

Insert the HPX-P200-XX Power Outlet Module into the main chassis of the HPX-1600 Base Assembly.

Note the position of module interlock tab: this tab should face towards the bottom of the HPX-1600 Base assembly when installed in its mounted position (FIG. 27).

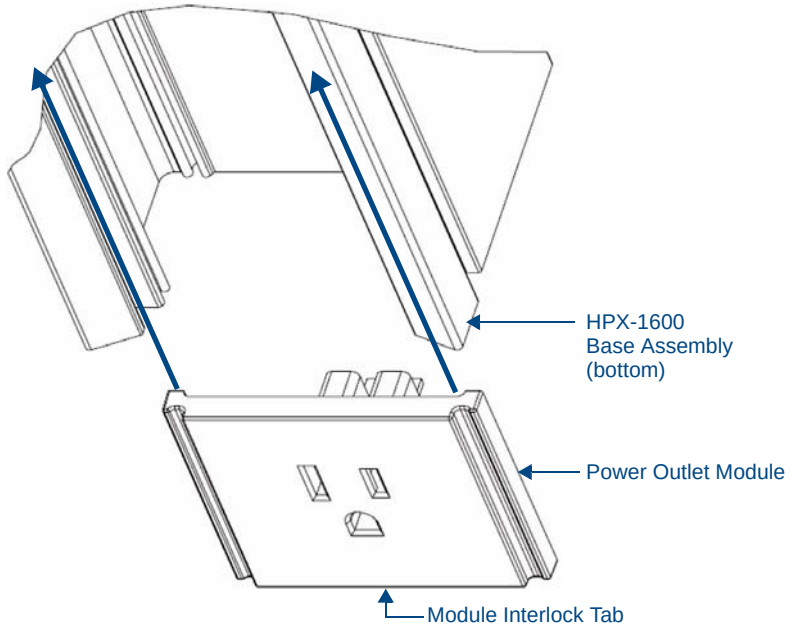


FIG. 27 Inserting the Power Module into the HPX-1600 Chassis

Step 3 - Install the 10 Amp Circuit Breaker (Included with HPX-PAK-XX Accessory Kit)

A Hydraport Power Accessory Kit (**HPX-PAK-XX**) is required for the HPX-P200-XX Power Outlet Module to be functional. This power accessory kit provides a 10 Amp circuit breaker for the Hydraport System to prevent power overload and complete the AC Power Circuit.

Position the Circuit breaker module included in the HPX-PAK-XX Power Accessory Kit in the main chassis of Hydraport base assembly such that it resides just below the mounting surface in which the Hydraport system is installed (FIG. 28).

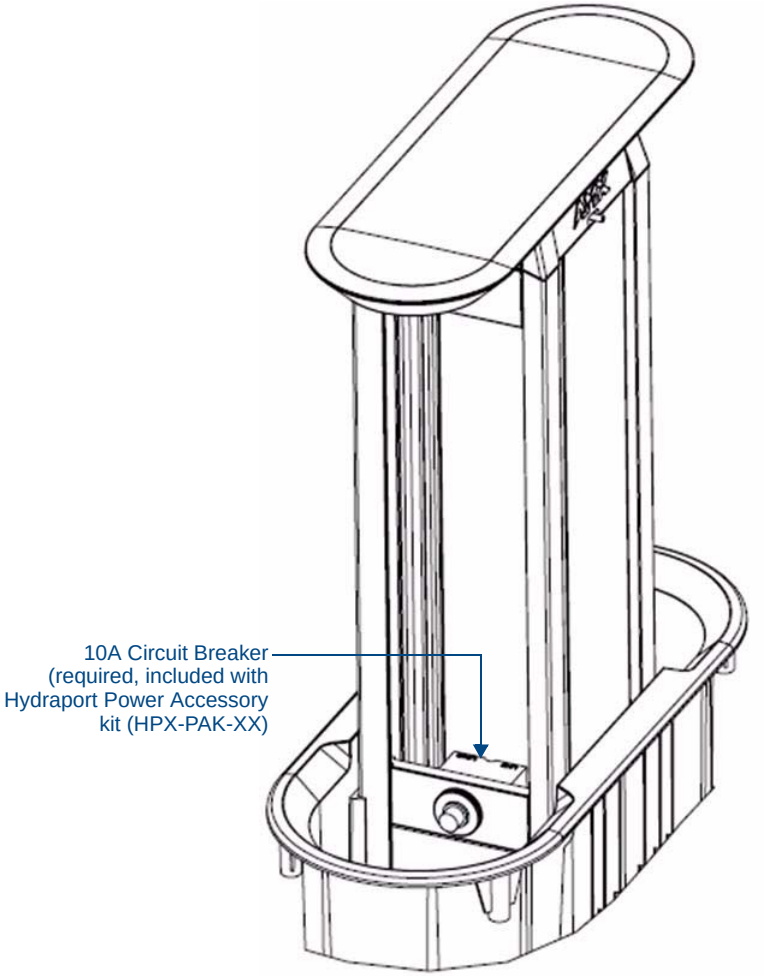


FIG. 28 10A Circuit Breaker Module positioned just below mounting surface level

HPX-PA-HVI High Voltage Isolator

Overview

The HPX-PA-HVI High Voltage Isolator (FG559-33) is designed to be installed in the HPX-1600-xx-xx Hydraport Retractable Connection Port to separate the AC Mains Power from low-voltage, secondary-circuits (FIG. 29).

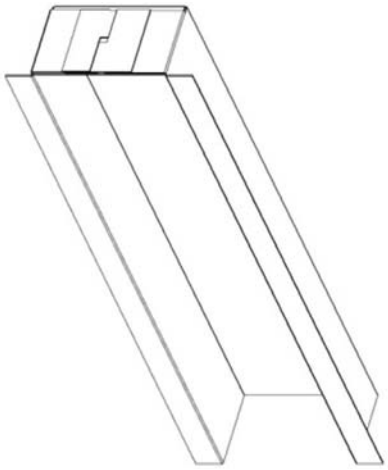


FIG. 29 HPX-PA-HVI (Folded for Installation)

CAUTION

If AC Mains Power Outlets are to be used in the HPX-1600 this item must be installed in order to maintain Product Safety Certifications. Failure to install this item properly may void Product Safety Certifications.

Product Specifications

HPX-PA-HVI Specifications	
Material:	Vulcanex ®, Vulcanized Fiber
Thickness:	0.4mm (0.016in)
Dielectric Strength:	300V/mil (4,800V)
Included Accessories:	Installation Guide

Installation

CAUTION

Only a professional, AMX-qualified installer should perform this installation. Installation must conform to all local codes. This product may not be installed by the end-user.

Tools Required

- Scissors

Step 1 - Install Low-Voltage Secondary Circuit Modules

NOTE

All low-voltage, secondary-circuit modules must be installed above the AC Mains Power Outlets and Circuit Breakers in the HPX-1600.

Install all low-voltage, secondary-circuit modules into the HPX-1600 Hydraport Base Assembly from the bottom of the unit according to the instructions supplied with the HPX-1600 and or low-voltage, secondary-circuit modules. For more information refer to the HPX-1600 Operation Reference Guide.

Position the cables coming from the low-voltage, secondary-circuit modules along the sides of the aluminum chassis. These cables will pass along the outside of the folded High Voltage Isolator and exit the unit through the square openings in the bottom cover.

Step 2 - Fold the High Voltage Isolator

Use the score lines on the High Voltage Isolator to fold the paper into the shape shown in Figure 1. Interlock the two tabs and slots at the top of the part with the square tab (back) folded inside the interlocking tabs (sides).

Pre-crease the folds as required to achieve a sharp, square fold.

Step 3 - Insert the High Voltage Isolator

Insert the High Voltage Isolator into the HPX-1600 Base Assembly so that the low-voltage, secondary-circuit cables exiting the chassis are trapped along the sides of the chassis. See Figures FIG. 30 and FIG. 31.

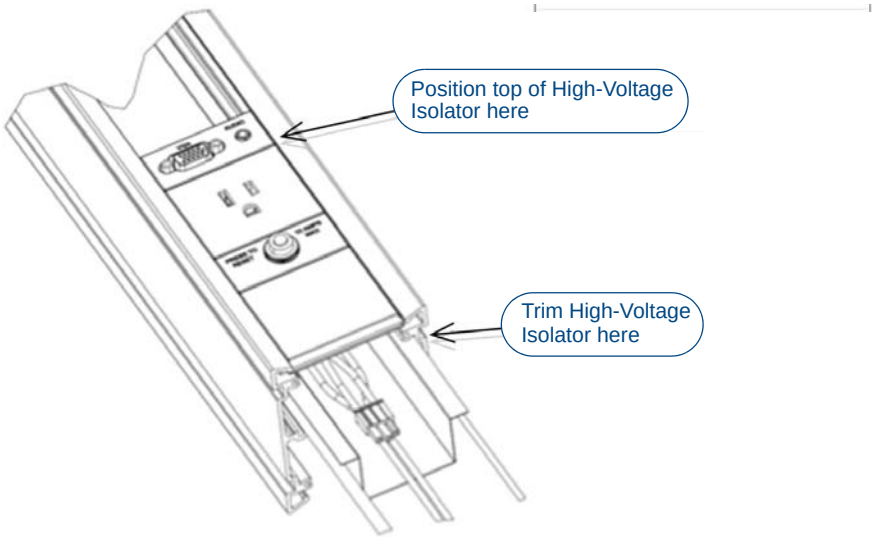


FIG. 30 High Voltage Isolator Installed

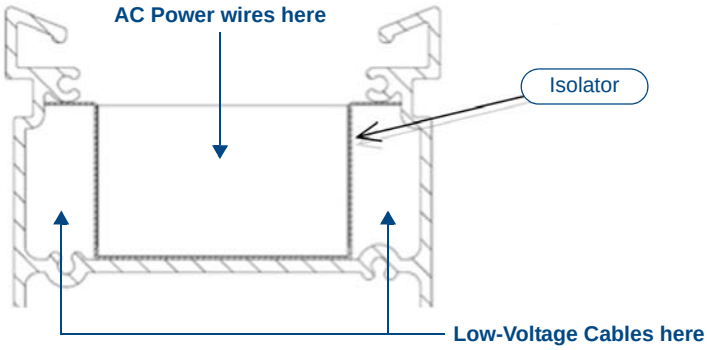


FIG. 31 High Voltage Isolator Cross Section

Step 4 - Mark and Trim High Voltage Isolator

1. Position the High Voltage Isolator so that the partition created by the top folded tabs falls between the last low-voltage, secondary-circuit module and the first AC Mains Power Outlet.
2. Mark the High Voltage Isolator at the point it exits the aluminum chassis.
3. Remove the High Voltage Isolator and trim the paper so that it will be flush with the bottom of the chassis upon final installation.

As an additional reference, use the template provided in FIG. 32 to trim the High Voltage Isolator to the proper length based on the number and type of AC Mains Power Modules installed.

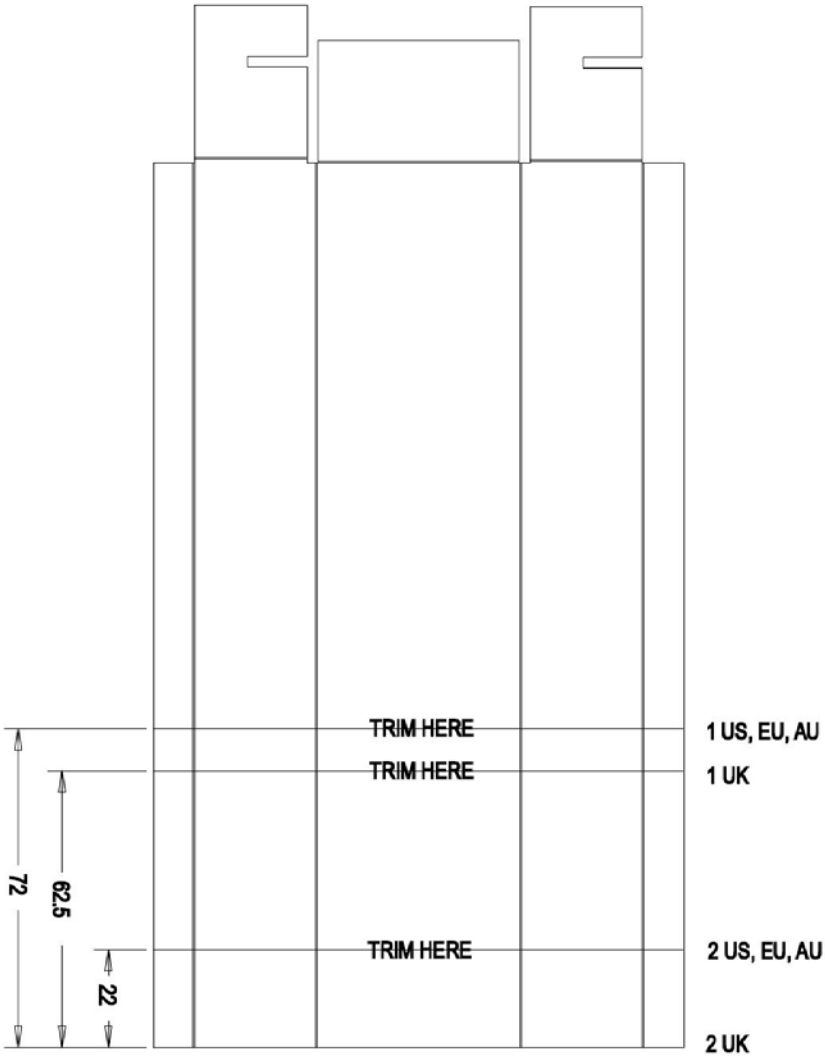


FIG. 32 High Voltage Isolator - Trim Template

NOTE

The template assumes that no Stop-Block (HPX-AC-SB) is used. The template is for reference only. Verify that the High Voltage Insulation paper is flush with the bottom of the aluminum chassis upon final assembly.

Step 5 - Install AC Mains Power Outlets

Reinstall the trimmed High Voltage Isolator, trapping the low-voltage, secondary-circuit cables on the sides of the unit as before. Install the AC Mains Power Outlets, Circuit Breaker Modules and Blank Panel Modules (Including Product Label Panels) as required.

Continue with the HPX-1600 installation as described in the accompanying Installation Guide.

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